

**WE CLAIM:**

1. A security envelope, comprising:

a barcode in a two-dimensional symbology located on the security envelope, the barcode encoding:

5 a public component, the public component comprising a public digital mail identification and a digital signature signed by the sender encrypted by the private key of the sender; and

a private component, the private component comprising a private digital mail identification and a digital signature signed by the sender encrypted by the public key of the receiver.

2. The security envelope as in claim 1, where the two-dimensional symbology is PDF-417.

3. The security envelope as in claim 2, wherein the barcode further encodes return address information.

4. The security envelope as in claim 2, wherein the barcode further encodes information relating to the physical characteristics of the security envelope.

5 The security envelope as in claim 4, wherein the information relating to the physical characteristics of the security envelope include at least one of: (a) the date the security envelope was sealed; (b) the size of the security envelope; and (c) the weight of the security envelope.

6. The security envelope as in claim 2, wherein the barcode further encodes stamp information.







(ii) a private component, the private component comprising a private digital mail identification and a digital signature signed by the sender encrypted by the public key of the receiver;

(2) at least one mobile computer, comprising:

(a) a bar code reader;

(b) a physical authentication identifier reader;

(c) a computer capable of comparing information obtained from the bar code reader and the physical authentication identifier reader;

(d) a database capable of storing at least one public key and at least one private key;

(e) a display; and

(f) a printer.

24. The system as in claim 23, where the two-dimensional symbology is PDF-417.

25. The system as in claim 24, where the at least one security envelope further comprises an optically clear epoxy with air bubbles suspended therein.

26. The system as in claim 24, where the at least one security envelope further comprises a cloth made from non-woven 40 micron diameter polymer fibers.

27. The system as in claim 24, further comprising:

a wired computer network capable of communication with the at least one mobile computers via a wireless medium.

28. The system as in claim 27, wherein the wired computer network is connected to the Internet using a TCP/IP protocol.